

tubes of currency from an associated column. A plurality of sensors, one for each column, are provided, each for sensing quantity of tubes in the associated column. A control system is operatively associated with the sensors for determining quantity of currency in the drawer.

Applicants traverse the rejection of claims 1-4, 6-9, 11-18 and 20 as obvious over Jo et al. U.S. 2003/0141265 in view of Mignault U.S. Patent No. 6,269,285.

Independent claim 1 specifies a coin dispensing system comprising a drawer for supporting vertical tubes of currency. Means are provided for withdrawing tubes of currency from the drawer. A sensor senses quantity of tubes in the drawer. A control system is operatively associated with the sensor for determining quantity of currency in the drawer.

None of the references, alone or in combination, relates to a dispensing system, let alone a coin dispensing system used with tubes of currency. More particularly, the references do not disclose or suggest a drawer for supporting tubes of currency, or means for withdrawing tubes of currency from a drawer, or a sensor for sensing quantity of tubes in the drawer.

Therefore, no combination of the references results in the invention.

Jo et al. discloses a merchandise display device arranging articles in rows with a pusher device for pushing the articles forward. Jo et al. does not disclose or suggest supporting vertical tubes of currency. Nor does Jo et al. disclose or suggest means for withdrawing any articles from the drawer, let alone tubes of currency. The action states that this limitation is construed as being performed by a customer. However, claim 1 does not recite a method. This limitation is expressed as a means plus function limitation which is to be construed to cover

disclosed structure and equivalence thereof. A customer withdrawing an article is not equivalent to structure disclosed in the specification for the present application.

The action admits that Jo et al. does not disclose sensing quantity of tubes in the drawer or a control system for determining quantity of currency in the drawer.

Mignault is directed to a system for monitoring a self-service freezer. A spring supports a storage bin for holding articles. A magnet is located on each storage bin and reed switches sense location of the storage bin. A computer system then determines weight in each stack to determine inventory requirements.

The references are not properly combined. Mignault uses a vertical pusher plate in a freezer chest, while Jo et al. uses a horizontal pusher plate for a merchandise display device. These devices are not analogous. Mignault does not disclose or suggest determining any dollar value. It essentially determines weight in a stack represented by vertical position of each stack. This is used to determine if a stack needs to be replenished. Whether or not an individual stack needs to be replenished does not relate to quantity of currency in a drawer. Particularly, the claimed invention determines quantity of currency in the drawer overall, not weight in a particular column.

Even if the references were properly combined, the resultant combination would not relate to the claimed invention as there are no means for withdrawing tubes of currency or control system for determining quantity of currency in the drawer.

Because the references do not disclose or suggest the combination of claim 1, the obviousness rejection is improper.

Claims 2-4 and 6 depend from claim 1 and are believed allowable for the same reasons therefor. Claim 6 specifies that the control system stores information representing value of currency in each vertical tube of currency and determines quantity of currency in the drawer responsive to the sensed quantity and the stored information. There is no disclosure or suggestion of such a control system in either of the references. Claim 6 is believed allowable for this reason as well.

Independent claim 7 is directed to a coin dispensing system comprising a drawer including a bottom wall connected to opposite side walls. A plurality of spaced dividers between the opposite side walls define a plurality of columns for supporting vertical tubes of currency. A plurality of dispensers are provided, one for each column, each for withdrawing tubes of currency from an associated column. A plurality of sensors, one for each column, sense quantity of tubes in an associated column. A control system is operatively associated with the sensors for determining quantity of currency in the drawer.

Claim 7 is not obvious for the same reasons discussed above relative to claim 1. In particular, none of the references, alone or in combination, disclose a drawer supporting vertical tubes of currency. Nor is there any disclosure of a plurality of dispensers, one for each column, each for withdrawing tubes of currency from a column. Nor is there any disclosure of a sensor for each column sensing quantity of tubes in a column.

For the above reasons, claim 7 and its dependent claims 8, 9 and 11-15 are not obvious.

Independent claim 16 specifies a coin dispensing system comprising a drawer including a bottom wall connected to opposite side walls, and a plurality of spaced dividers between the opposite side walls defining a plurality of columns for supporting vertical tubes of currency. A plurality of pushing plates, one for each column, and biasing means bias each pushing plate forward. There is a magnet on each of the pushing plates. A plurality of magnet operated switches spaced along each column sense position of the associated magnet. A plurality of impedance networks, one for each column, are each electrically connected to the plurality of magnet operated switches for the associated column, so that voltage of the impedance network varies with position of the associated pushing plate. A control system is operatively associated with the impedance network for determining quantity of currency in the drawer.

As noted above, none of the cited references, alone or in any proper combination, results in a drawer defining a plurality of columns supporting tubes of currency in vertical orientation. Nor do any disclose pushing plates in each column with a magnet on each pushing plate used with magnet operated switches and an impedance network and control system for determining quantity of currency in the drawer.

The action equates reed switches in Mignault as part of a system of resistors having voltages and impedances throughout. There is no basis for such a conclusion. A reed switch is a magnet operated switch that has an on state and an off state. The reed switch can be used in numerous types of circuits. A reed switch is not inherently used in an impedance network. Indeed, Mignault discloses individual reed switches being connected to a controller through individual interface circuits. This does not suggest an impedance network where voltage

of the impedance network varies with the position of a pushing plate. The circuit is detecting on and off state of individual switches, rather than voltage of an impedance network.

Claims 17, 18 and 20 depend from claim 16 and are believed allowable for the same reasons therefor.

For the above reasons, claims 1-4, 6-9, 11-18 and 20 are believed allowable and withdrawal of the rejection is requested.

Applicants traverse the rejection of claims 5, 10 and 19 as obvious over Jo et al. in view of Mignault and further in view of O'Brien et al. U.S. Patent No. 6,415,953.

Claims 5, 10 and 19 depend from claims 1, 7 and 16. The deficiencies with respect to Jo et al. and Mignault and the independent claims are discussed above. Claims 5, 10 and 19 specify semi-cylindrical housing for receiving a vertical tube of currency and means for rotating the housing for dispensing a vertical tube of currency.

O'Brien does not disclose or suggest the deficiencies noted with respect to independent claims 1, 7 and 16. It does not relate to a coin dispenser. Nor does it disclose or suggest determining quantity of currency in a drawer. Thus, no combination of the references discloses or suggests determining quantity of currency in a drawer. The rejection should be withdrawn.

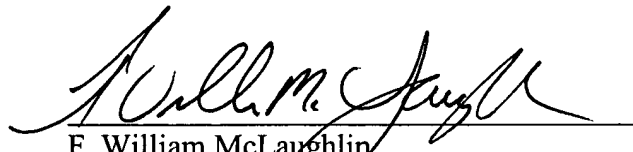
None of the cited references even consider determining quantity of currency in a drawer as none of the references relate to a coin dispensing system. The fact that not a single reference is cited relating to a coin dispensing system which supports vertical tubes of currency

and determines quantity of currency in a drawer is indicative of the fact that the claimed invention is unique and is not obvious.

Reconsideration of the application and allowance and passage to issue are requested.

Respectfully submitted,

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